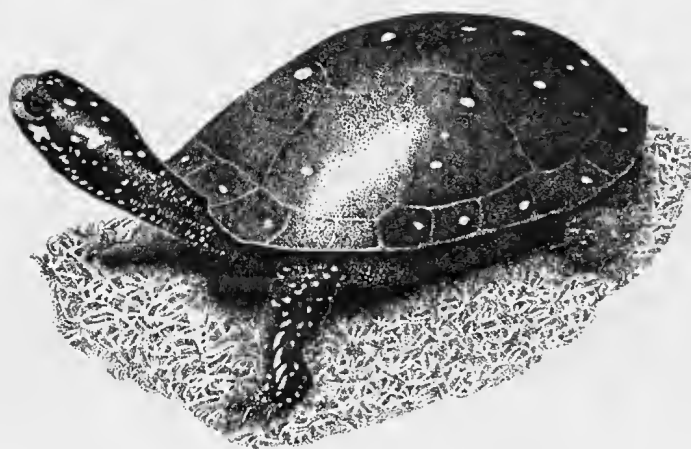


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TRAIL & LANDSCAPE



*A Publication Concerned With
Natural History and Conservation*

The Ottawa Field-Naturalists' Club

TRAIL & LANDSCAPE

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The Ottawa Field-Naturalists' Club

— Founded 1879 —

President
Fenja Brodo

Objectives of the Club: To promote the appreciation, preservation and conservation of Canada's natural heritage; to encourage investigation and publish the results of research in all fields of natural history and to diffuse the information on these fields as widely as possible; to support and co-operate with organizations engaged in preserving, maintaining or restoring environments of high quality for living things.

Club Publications: THE CANADIAN FIELD-NATURALIST, a quarterly devoted to reporting research in all fields of natural history relevant to Canada, and TRAIL & LANDSCAPE, a quarterly providing articles on the natural history of the Ottawa Valley and on Club activities.

Field Trips, Lectures and other natural history activities are arranged for local members; see "Coming Events" in this issue.

Membership Fees: Individual (yearly) \$40

Family (yearly) \$45

Student (yearly) \$20

Hard copy of Canadian Field-Naturalist \$30

Subscriptions to Trail & Landscape:

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Membership application, correspondence:

THE OTTAWA FIELD-NATURALISTS' CLUB

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Welcome New Members

Ottawa Area

Diane Beckett
Jane Boni
Duncan Campbell & Family
Brenda Campbell & Family
Erica Claus & Family
Barbara Cuerden
Christie Delaney & Family
Mariann Domonkos & Family
Bryan Dowkes
Sylvie Faulkner
James Ferguson & Family
Joanne Gale & Family
Mary Hadwen
John Harrison
Fiona Johnstone & Family
Janet Kennedy & Family
Luc Laframboise
L. Livermore/C. Baumgartner
Jonathan Mack & Family

Erika Range & Family
Jennifer Ried & Family
Elizabeth Robson Gordon
Beverly Sawchuk
Gwenever Smith & Family
Janet Spiers & Family
Michelle Sutherland & Family
Elizabeth Tevlin & Family
Michelle Tribe & Family
Sarma Vishnubhatla & Family
Debra Wagorn
Sandra Walford
Kenneth L. Walper & Family
Keith Wickens
Patricia Williams
Catherine Willis-O'Connor
Marie-Claude Young
Mathieu Zerter & Family

Gatineau Area

Lara Griffiths & Family
Andrea Rowe
Martha Woodruff

Ontario

Beverley Akins-Brown
Kristen Campbell & Family
Alexander Shillinglaw

United States

Doug Smith

Henry Steger
Chair, Membership Committee
May 2016

Karen McLachlan Hamilton Steps Down as Editor of *Trail & Landscape*

Paul M. Catling

Karen began editing *Trail & Landscape* (*T&L*) with Volume 35 Number 3 in 2001. She officially stepped down as editor in March 2016 with the production of Volume 50 Number 2. Over that period of 15 ¼ years, 63 issues of *T&L* were produced and circulated. Under Karen's leadership, the magazine retained its significance in communication, conservation and education that had developed over the previous 35 years with only a handful of conscientious and very dedicated editors. *T&L* has also retained its great popularity with members of the Ottawa Field-Naturalists' Club and with naturalists far beyond.

While editor, Karen wrote 30 articles in *T&L*, ranging from book reviews to meeting reports, resource and popular articles, and indices. These written contributions also maintained an important trend in *T&L* editorship. Her ability as a contributor added both diversity and important information about club events. Her enthusiasm has been highly valued by club members and writers.

Karen did not like "bossing people around", and she referred to the production of *T&L* as a "group effort". However you look at it, people gathered around her and did a great job. These people included a mailing team, proofreaders, associate editors, editorial assistants, and a business manager; Karen was required to know what was happening with this *T&L* staff and to report to the Publications Committee. She also helped this committee to complete annual reports, develop publication policies and generally to ensure that the OFNC Board was satisfied with progress on the mandate afforded by the club publications.

For the duration of her time as Editor, Karen served on the OFNC Board. She enjoyed attending the annual Soirées (now "Awards Nights") where she helped to document awards and make sure that new members enjoyed the evening.

Karen's day job is working with the Canadian Food Inspection Agency as an Entomology Biologist, identifying plant pests to enable appropriate control measures. Although this work is very rewarding, she is often extremely busy. Editing *T&L* enabled her to pursue her life-long interest in helping with nature conservation and education.

Many thanks to Karen McLachlan Hamilton for a very substantial contribution. In 1967 the first issue of *T&L* was described as "first rate", (*Ottawa Journal*, Saturday March 4, 1967), and 50 volumes later it still is.

Paul M. Catling
Publications Committee

A New Chapter in *Trail & Landscape*

Karen McLachlan Hamilton

As you may have noticed, this issue has been produced by *Trail & Landscape*'s new Editor, Annie Bélair, and Copy Editor Diane Kitching. As you can see, it is in great hands and continues to be the quality publication you expect from the Ottawa Field-Naturalists' Club (OFNC). Both Annie and Diane are not new to the Club. They have been OFNC members, have served on the Board, and have been actively involved with the Macoun Field Club for many years. They are definitely busy people.

It has been an honour to be Editor of *T&L* these past years. I have discovered much about natural spaces in and around Ottawa that I probably would not have otherwise. The articles people have written have been all over the map and I have learned so much from them, such as where the introduced plants, insects and fish species are found in the Ottawa region, and how to identify the local native goldenrods. I have also enjoyed all the bird sightings, and realized the importance of stopping your car when you see a group of people with spotting scopes on the side of the road. I think my favourite pieces are the reports on observations made by you, the members, whether it was from your backyard or elsewhere. And I would be remiss if I did not mention the poems.

I believe the excursions and monthly meetings are worthy of special mention. The Club offers a diverse program, from plants to animals to fungi to geology. Anyone could learn almost anything from local experts just by attending Club activities. What a nice way to learn about things I would not normally encounter in my daily routine.

I think the most important lesson I learned was that a lot of people care. It is disheartening to see another road running through the Greenbelt, or another greenspace being developed or yet another turtle/skunk/porcupine dead along the side of the road. What could one person do? What the Ottawa Field-Naturalists' Club has taught me was yes, in spite of a group's best efforts, natural spaces are lost, but others, such as the Alfred Bog, the Gervais Property (aka the Westmeath Caves) and the Frontenac Arch continue to exist due to the efforts from natural history clubs like the OFNC.

I would like to thank the OFNC for the opportunity I had, to welcome Annie and Diane to the world of *T&L*, and to encourage all members to continue to enrich our lives by writing about your observations.

The 137th Annual Business Meeting

Annie Bélair

The Annual Business Meeting (ABM) was exceptionally held in March this year, on the 21st, because there were delays in the production of the financial statements. It took place at the Fletcher Wildlife Garden, as it had in the last few years, and 21 club members attended. Everyone had a chance to review hard copies of the minutes of the previous ABM, the financial statements, a summary table of the financial statements, the 2016 budget, the OFNC committees' annual reports for 2014-2015 and the newly updated Terms of Reference for each committee.

The club's finances were presented in a very positive tone. Ken Young, the treasurer, explained that revenue from our major sources (membership fees, donations, and *The Canadian Field-Naturalist*) has increased in 2015. Also, the legal procedures around the generous bequest from Violette Czasak (who passed away in 2013) was finalized: the net disbursements to the OFNC from the entire estate totaled \$1,235,226.

With these extra funds, the club was able to contribute to various projects that pertain to its mandate. Ken highlighted the following donations in 2015:

- \$200,000 to the Nature Conservancy of Canada towards the purchase of land near Westmeath, Ontario (now called the Westmeath Caves)
- \$5,000 to the Mississippi Valley Field Naturalists to help cover the cost of the appeal to the Ontario Municipal Board to stop a planned housing development that would destroy a portion of the Burnt Lands Alvar
- \$4,500 to the Innis Point Bird Observatory to help them hire a bander-in-charge for the 2016 Spring Migration Monitoring Program

He added that the club also created a new program in 2015, the OFNC Research Grants, which awards \$15,000 yearly. This fund supports field-based research activities that reflect and promote the Club's objectives within eastern Ontario or western Quebec, focused particularly upon the Club's study area – inside the 50 km radius from the Peace Tower in Ontario or Quebec. (See 2015 grant recipients Jean Faubert's article on page 112 and Stephanie Haas's on page 130.)

Note: The minutes of the ABM and the financial statements are published in *The Canadian Field-Naturalist*, vol. 130(3) (2016).

Also of interest were the terms of reference for each OFNC committee. They were updated and published on the website in 2015 (<http://www.ofnc.ca/commit.php>). They are short documents describing the composition, the mandate and the duties of each committee.

As it is done every year, the Nominating Committee presented the slate of officers that will sit on the Board of Directors, and the attendees voted to approve it.

The Executive Committee for 2016:

Fenja Brodo	President
Diane Lepage	1st Vice-President
Lynn Ovenden	Recording Secretary
Ken Young	Treasurer

And the directors:

Annie Bélair	Ann MacKenzie
Carolyn Callaghan	Jakob Mueller
Owen Clarkin	Rémy Poulin
Barry Cottam	Gordon Robertson
Edward Farnworth	Jeff Saarela
Diane Kitching	Henry Steger
Alex MacDonald	Eleanor Zurbrigg

OFNC President Fenja Brodo thanked Barbara Chouinard, Karen McLachlan Hamilton, Louis L'Arrivée and Julia Cipriani who will not be returning to the Board. She thanked Henry Steger and Eleanor Zurbrigg for their terms as first and second vice-presidents. She also mentioned other changes among the executive committee and chairs of committees:

- Lynn Ovenden is the new recording secretary, taking over from Annie Bélair
- Annie Bélair will be the new editor of *Trail & Landscape*
- Gord Robertson is the new chair of Education and Publicity
- Carolyn Callaghan has stepped down as editor-in-chief of *The Canadian Field-Naturalist*
- Diane Lepage is returning to the Board, this time as first vice-president
- Jakob Mueller is the new chair of the Events Committee, taking over from Julia Cipriani
- Mark Patry will attend board meetings as the representative of the Birds Committee (but will not be a director), taking over from Rémy Poulin
- Rémy Poulin is now chair of the Finance Committee

The ABM turned out to be a short one, as it took place right before the monthly board meeting. It was a good, useful presentation of the business aspect of our club.

Highlights from the 2014-2015 Annual Committee Reports

Annie Bélair

It is essential to recognize the hard work that OFNC volunteers do to manage our club and to deliver such great events, activities and publications! Here are some highlights from the annual committee reports for the fiscal year running from October 2014 to September 2015. They were presented to the OFNC Board of Directors, and made official by a vote of the attendees at the Annual Business Meeting on March 21, 2016. They are published in *The Canadian Field-Naturalist*, volume 130(3). They are also available on the OFNC website, on the committee page, at <http://ofnc.ca/commit.php>.

Awards Committee

- Presented, in April 2015, the 2014 OFNC awards to Ross Layberry (Honorary Member), Natalie Sopinka (Member of the Year), Elizabeth Morton (George McGee Service Award), Anouk Hoedeman (Conservation. Member), Paul and Cathy Keddy (Conservation, Non-member) and Tom Spears (Mary Stuart Education Award).

Birds Committee

- Published the revised *Ottawa District Bird Checklist*
- Supported the creation of Safe Wings Ottawa, which was originally the Ottawa chapter of FLAP (Fatal Light Awareness Program)
- Continued to organize bird counts, manage Falcon Watch at the Heron Road site, and maintain a number of bird feeders throughout the Ottawa region

Conservation Committee

- Wrapped up field observations for the year-long (2014-2015) Constance Bay bio-inventory
- Organized a bioblitz at the Westmeath Caves property in partnership with the Nature Conservancy of Canada
- Convinced the City of Ottawa to modify roadside curbs adjacent to Mud Lake to allow the passage of wildlife such as turtle hatchlings

Education and Publicity Committee

- Oversaw the ongoing project of improving the club's communications and revamping its website
- Brought the OFNC displays to several public events around the city
- Replied to over 20 local organizations and schools looking for speakers or walk leaders
- Selected and sponsored one high school student to attend Ontario Nature's Youth Summit in September 2015

Events Committee

- Planned and coordinated 54 outings, 7 workshops, 10 monthly meetings, and the Awards Night
- Organized a four-event trip in May in the Pembroke/Westmeath area

Finance Committee

- Reported a smooth-running and efficient financial system for the OFNC
- Oversaw the preparation of the 2015-2016 budget
- Responded to issues raised by the Board of Directors which included donations in kind, the investment guideline policy, and preliminary succession planning for the Treasurer position

Fletcher Wildlife Garden (FWG) Committee

- Raised almost \$5000 with the Annual Plant Sale
- Cleaned and painted the FWG Interpretation Centre, bought new shelving, and re-organized the kitchen
- Formed a Tuesday afternoon volunteer group to plant trees, shrubs and wildflowers in the Old Woodlot where over 50 ash trees had been cut because of the Emerald Ash Borer
- Continued work on invasive species management
- Added a fern trail in the Backyard Garden in honour of Bill Cody

Macoun Club Committee

- Organized 18 indoor meetings with presentations from committee members or invited speakers
- Led 14 five- to six-hour-long field trips either on private properties in Lanark County or in the Club's nature-study area in the National Capital Commission's greenbelt (Stony Swamp)
- Organized a bus trip to the Montreal Ecomuseum
- Bought birding field guides with funds donated in memory of former member Bob Bracken
- Produced the 69th edition of its annual publication, *The Little Bear*

Membership Committee

- Reported a slight increase in total membership
- Highlighted the increase in the number of student memberships

Publications Committee

- Published 4 issues of *The Canadian Field-Naturalist* and the annual 4 issues of *Trail & Landscape*
- Launched the OFNC Research Grant program

Treasurer

- Reported that revenue from the club's major sources (membership fees, donations, and *The Canadian Field-Naturalist*) has increased
- Continued with routine tasks related to the OFNC's finances

OFNC Committees for 2016

Annie Bélair

The following OFNC committee members were approved by the Board of Directors. Members may be added during the year as approved by the Board of Directors. The members listed below will operate your club in 2016. Committee Chairs appear in bold letters. Should you have any questions, comments, complaints or compliments pertaining to the operations of a committee, or should you desire to serve on a committee, please contact the Chair or speak to a member of the relevant committee. The contact information is available on the OFNC website (www.ofnc.ca).

AWARDS

Eleanor Zurbrigg

Irwin Brodo

Julia Cipriani

Christine Hanrahan

Karen McLachlan

Hamilton

BIRDS

Chris Traynor

Tony Beck

Bob Cermak

Lorraine Elworthy

Anouk Hoedeman

Bernie Ladouceur

Bev McBride

Mark Patry (rep. on
Board of Directors)

Rémy Poulin

Jon Ruddy

Jennifer Spallin

Nina Stavlund

Greg Zbitnew

BIRDS RECORDS

(subcommittee)

Michael Tate

Rémy Poulin

(Rec. Secretary)

Bruce di Labio

Rod Dubois

Marcel Gahbauer

Mark Gawn

Jon Ruddy

Jeff Skevington

Bernie Ladouceur

(alternate)

Christina Lewis

(alternate)

Chris Traynor

(alternate)

CONSERVATION

Owen Clarkin

Ken Buchan

Erwin Dreessen

Sandy Garland

Christine Hanrahan

Fred Schueler

David Seburn

Ian Whyte

EDUCATION AND PUBLICITY

Gordon Robertson

Mark Brenchley

Fenja Brodo

Linda Burr

Wendy Cotie

Sandy Garland

Lynn Ovenden

Lucy Patterson

EVENTS

Jakob Mueller

Holly Bickerton

Julia Cipriani

Owen Clarkin

Hume Douglas

Sue Milks

FINANCE

Rémy Poulin

Ann MacKenzie

Ken Young

Ivan Whitehall

**FLETCHER
WILDLIFE
GARDEN**

Judy Dodds –
Friends of the
Farm rep.
Ted Farnworth
Sandy Garland
David Hobden
Diane Lepage
Gordon Robertson
Henry Steger
Eleanor Zurbrigg

MACOUN CLUB

Rob Lee
Annie Bélair
Barbara Gaertner
Diane Kitching
(rep. on Board of
Directors)
Allison Patrick

MEMBERSHIP

Henry Steger
John Cooper

PUBLICATIONS

Jeff Saarela
Dan Brunton
Carolyn Callaghan
Paul Catling
Tony Gaston
Bill Halliday
Amanda Martin
Karen McLachlan
Hamilton
Frank Pope
David Seburn

The 2016 OFNC Awards Night

Luke Periard

Another productive year with the OFNC has gone by, marked by the annual Awards Night at St. Basil's Church on Rex Avenue. I arrived at the event and was greeted by many friends and the familiar faces of Club members. One of the reasons I enjoy this event is because it gives members a chance to network, connect with each other, see and hear about what the Club has done since the last Awards Night and talk about our favourite topic: nature.

I first visited the appetizer table, with its display of crackers, assorted cheeses, wine, coffee, juice, chips and spider cupcakes. Next I went on to do some socializing and catching up with people's lives before I visited the Macoun Club members standing by their displays.

One member was displaying a project which compared humans and animals by looking at their respective bone patterns. The research was done by Morgan, a Macoun Field Club member and current president. She observed striking similarities in bone parts, such as the tibia and femur, that humans share with animals. Her poster also pointed out that there are some bone parts found in mammals that are present in the reptile class, but in a totally different part of the body!



*Spiders and insects "crawling"
over the Awards Night cupcakes*

The second project that I had the pleasure of visiting was presented by Samantha. She's been a Macoun Club member for three years now. One of reasons she likes being a member is because she can do what she enjoys most: learning about and showing her appreciation for nature. She had collected an entire skeleton of a snapping turtle that had washed up on a beaver dam in her yard. She had treated the bones to clean and preserve them so that she could spend time investigating turtle bone structure. In her research about the snapping turtle jaw, she learned that they can clamp down on their prey with a force of 208 Newtons!

Between the poster viewing, I talked to other members who were walking about. I spoke to Barbara Gaertner, who has been a member for 42 years. She joined after she moved to Ottawa, back when Ewan Todd was the OFNC president. What drew her to the OFNC was her interest in nature. She has kept every single *Trail & Landscape* issue and has been an active volunteer for the Club. I also had the chance to interview Hume Douglas, who first got involved in the Club in 2007. I asked him what attracted him to join the Club, and he replied that a member had invited him to a couple of excursions and lectures, and that he has been hooked ever since.

Another project poster at the evening's social was presented by Gabriel. It described how the presence of nesting platforms in nature was a great help to the ospreys' recovery from near extinction. He also displayed a list of priority birds at risk of extinction. The no. 1 bird that was at the most risk was the Kinglet Calyptura (*Calyptura cristata*), considered critically endangered by BirdLife International. It is endemic to the Atlantic forest in south-eastern Brazil, and there has not been a confirmed sighting of the bird since 1996.

Next was the formal part of the evening, MC'd by Rob Alvo. The Macoun Club president, Morgan, spoke about the Macoun Club, and then prizes were given to the Macoun Club members who had prepared projects.



Rob Alvo, the Awards Night MC

Next, OFNC president Fenja Brodo presented the Honorary Member Award to Robert E. Lee. This award is presented in recognition of outstanding contributions to the successful operation of the Club or to Canadian natural history by a member or non-member. Rob Lee was very much deserving of the award, having been a leader of the Macoun Field Club for 30 years. Due to his dedication, he has created a generation of conservationists, biologists, chemists and teachers in the field of natural history. Being organized, having a respect for children and their natural curiosity, having an interest in the



Rob Lee, receiving the Honorary Member Award from OFNC President Fenja Brodo

natural world are some of the important skills you need to be a successful Club leader, and this describes Rob Lee. The OFNC is very proud and appreciative to have such an extraordinary person within their organization.

Rob is not only a leader of a naturalist club for youth, but is a seasoned naturalist and has published reports of documented changes in the Greenbelt area near

Stony Swamp over a period of 40 years with detailed and accurate vegetation maps. This has given researchers and field naturalists an unparalleled look into the ecological succession of suburban areas. Making detailed observations and executing experiments over four decades over a specific region makes his findings and publications one of the most complete of its kind in the country.

Rob attended the University of Guelph and trekked solo through the Arctic, making discoveries and following in the footsteps of his archaeologist father, Dr. Thomas E. Lee. With his exceptional writing and observation skills, he was successful as a scientific writer and editor; he now assists young writers in the Macoun Field Club in preparing their contributions to the Club's nature journal, *The Little Bear*.

Rob has received other awards from the OFNC, such as the 1990 George McGee Service Award, the 2000 Anne Hanes Natural History Award and the 2008 Mary Stuart Education Award. Rob Lee now is added to the Club's list of the distinguished Honorary Members.

The next award presented was the George McGee Service Award in recognition of a member who has contributed significantly to the smooth running of the Club over several years. This was presented to Roy John. He has published book reviews in *The Canadian Field Naturalist* and held the role of Book Review Editor from 2003 until 2015. In this role, he has reviewed more than 250 books, 145 articles, 120 popular publications, several handbooks, book chapters and consultant reports. Because of his wide range of knowledge and personal experiences, his reviews often contain personal insight and interesting bits of information that could only come from someone familiar with the subject.

Roy is a passionate birder and has led many local birding field trips, including the biennial Pelee trip in the past few years. He has frequently been a speaker for the OFNC, giving Club members attending the chance to see his photos from parts of

the world few have managed to visit. He is editor of *Blue Jay* (a publication of the Saskatchewan Natural History Society), and *OFO News* (Ontario Field Ornithologists), and a contributor to the *Atlas of the Breeding Birds of Ontario*. He also gives presentations about birds in seniors' residences throughout Ottawa. He was active in the OFNC Council (now Board of Directors) in 1987, Recording Secretary in 1988, and Vice-President in 1989-90 as well as in 2000-2003. In 1991 he was club President and was Chair of Excursions and Lectures from 2001 to 2003.



Roy John, recipient of the 2015 George McGee Service Award

There was a short break in the award presentations to enable Mark Brenchley to update Club members on the building of a new club website, as well as the modernization of the Club's brand and logo. Mark then unveiled the Club's new logo. (See article on page 109.)



Mark Brenchley presenting the OFNC's new logo and alternate versions



Lynn Ovenden, receiving the Member of the Year Award from OFNC President Fenja Brodo

Returning to the awards, the Member of the Year Award was presented to Lynn Ovenden. This award recognizes a member judged to have contributed the most to the Club in the previous year. Her contributions include oversight and participation in the development of the OFNC communication plan, including a proposal for re-designing the Club's website. She also invites university students to write blogs reporting Club activities for the OFNC site, proposes and plans outings for the Events Committee (which are very well attended), and stepped up to support the decision to refresh the FWG Interpretation Centre in 2015. Her goals include attracting and retaining members of the

Club by strengthening of the Club's online presence, and she has implemented this through the hiring of a consultant to support this project. By surveying members, a report was tabled with recommendations that included the modernization of the OFNC website, centralizing and coordinating communication, promoting a word of mouth campaign to grow membership, and broadening the Club's use of social media. Lynn, along with members of the Education and Publicity Committee, has put in hundreds of hours to move this action plan along.

Lynn and the Education and Publicity Committee post blogs on the site *ofnc.wordpress.com* which spreads the word about the OFNC's activities, outings, meetings, events and reports. She has coordinated outings to the Gervais property, birding at Westmcath Provincial Park, mothing with Diane Lepage at the Shaw Woods Outdoor Education Centre and a guided walk through the old growth forest in Shaw Woods.

Lynn is an energetic, considerate and dedicated person and has brought her positive attitude into every project she takes on, and this is what inspired the Club to present her with the Member of the Year Award for 2015. Lynn gladly accepted the prize and recited to us a quote: "We come from the earth, we return to the earth, and in between we garden."

The next award was the Conservation Award to a non-member for outstanding contribution in the cause of natural history conservation in the Ottawa Valley.

Miller Paving Limited was recognized for its ecological land protection measures in the Braeside Quarry. Tom Jones (Property Manager) and Leonard McGrath were present to accept the award. In accepting the award, they said that they recognize the value of sensitive species that need our protection. They also invited those that are interested to visit the site and walk along the 3 km trail built to allow public exploration in the protected area.

The proposal by Miller Paving to expand their Braeside Quarry operation into a part of Renfrew County's Braeside Alvar caused concern in the Arnprior area among local residents who pointed out the

needs to protect alvar vegetation and flora in the area. Miller Paving undertook a biophysical investigation of the site, and this issue was heard before the Ontario Municipal Board. The Board concluded that Miller Paving's natural environment conservation plan satisfied provincial environmental protection requirements. What is of note is the degree to which the project's conservation plan provides for the protection of significant ecological features and functions. The quarry expansion plan establishes an ecologically self-sustaining Significant Wildlife Habitat Protection Area of over 24 ha, consisting primarily of globally rare alvar forest but also including a comprehensive set of the regionally significant floral and faunal features known from the much larger Braeside Quarry property. Importantly, the Protection Area is legally fixed in place by both the project's approved Site Plan and municipal bylaws. A particularly intriguing aspect of the plan is that even after quarry expansion is completed (likely 80 or more years away), the Protection Area will continue to sustain the largest populations of provincially rare Ram's-head Orchid (*Cypripedium arietinum*) and Neglected Milk-vetch (*Astragalus neglectus*) known anywhere. In addition, the plan includes a substantial allowance for wildlife corridors and ground water protection and provides for a decade-long monitoring program of the site's ecological integrity.

Because of the resourcefulness and willingness of the management at Miller Paving to engage in a protection plan, the OFNC decided they were deserving of the non-member Conservation Award.



Tom Jones and Leonard McGrath accepting the Conservation Award to a non-member on behalf of Miller Paving Limited

Then the first President's Prize was awarded to Ken Young. This prize is awarded at the discretion of the OFNC president for singular contributions to our Club that do not quite fit the other Club awards categories. Since 2012, Ken Young has been our Club treasurer and has worked hard at it. In particular, he was given the responsibility of handling the Club's generous bequest from Violetta Czasak. With this bequest, the Club has undertaken many projects thanks to Ken's diligence.

Ken has been a member since 1985 and contributed in more ways than as Treasurer, which is in itself a full-time assignment. He chaired the Finance Committee and was part of the Conservation Committee. Ken accepted the award with the message to members that there are many ways for members to take part in the Club and lots to enjoy.



Ken Young, winner of one of the President's Prizes



Linda Burr, winner of the other President's Prize

The next person to receive the President's prize was Linda Burr. In 2013 Linda volunteered to take on the final editing and publication of the Larose Forest booklet mostly written by Gillian Marsten and Christine Hanrahan. Linda's diplomacy and her writing skills were important to this job, and we now have the publication to show for it.

In addition to this, she and Lynn Ovenden were instrumental in launching the project to modernize our image and communication tools to better interact with our members and the public. Because of her dedication and willingness to take on these projects, she was awarded the President's prize. Linda accepted the award and said that what she had wanted was to be part of something that would be part of conservation. She thanked the Education and Publicity Committee.

After the awards were presented, Hume Douglas began the Despot's Natural History Quiz, which I never manage to win. Passages from Rob Alvo's book (*Being a Bird in North America*) were read and members had to guess what the passages were describing. In addition, Hume showed pictures of insects and birds for members to guess. Morgan from the Macoun Club was the winner of the quiz. Looks like her bone studies have paid off in more ways than one!

Following the quiz, Annie Bélair presented prizes for the photography and art on display. We also had a digital photo contest for the first time this year. The prize

went to Sophie Roy for her photo of a barn owl. Another prize went to Alexis Williams for her art presenting a mushroom.

Special thanks were given to Annie Bélair, Connie Clark (food), Dave Seburn, Elizabeth Moore, Hume Douglas, Fenja Brodo, Hildegard Henderson (food), Gordon Robertson, Julie Cipriani, Renée Devries (cupcakes), Ken Young, Louis L'Arrivée, Rob Alvo, Sarah Wray, the parish of St. Basil's Church for use of the hall, and of course us, the members.

Spotlight on Young Naturalists: The Macoun Club's President's Speech at the 2016 OFNC Awards Night

Morgan McAteer

As you all know, I am the president of the Macoun Club and this is my fifth year in the Club. In that time I have experienced a lot I could talk about: plants, animals, people getting soaked... But for now I'm just going to talk about why Macoun Club is great.

One, the people I've met! In my five years I have met quite a few interesting people with many different interests. We've got a bird guy, and bug guy, a bone girl. If you have questions, chances are *someone* will have the answer. Plus, I personally don't know anyone else at my school who collects bones, so for me it was great knowing that I was not alone in my interests. Being able to talk about this stuff with people and not be called weird made me feel so much more included. Also, some of these people have really great stories; it is not every day you meet someone who falls face first into a beaver pond while trying to get a better look at a patch of sundews.

Two, the things I've learned. Macoun Club makes me look smart. I can correct my teachers about nature. I have learned many things in Macoun Club that I would not learn in school, at least not for a long time. I can teach my friends things, too, and educate younger members of the Club. I have learned skills, like how to start a fire,

why not to mess with a muskrat, and how to easily identify beech trees. I really like this club because all the leaders and kids are very knowledgeable, so I learn something every time.

Three, I just really love this club. Macoun Club is awesome. I meet new friends, learn things, stay active, and have fun. Macoun Club is what gets me through a boring Thursday: I just say to myself, "OK, Morgan, just two more days until you're stuck in the forest with wet logs to start a fire with – can't wait! :) I love this club and what it means to me.



Macoun Club Friends Gabrielle, Morgan, Mya, Julia, and Amaya, taking delight in the deepest, softest bed of Reindeer Lichen they have ever seen

News from the Board of Directors, May 2016

Fenja Brodo, OFNC President

We have over 700 local members of our Club, yet we estimate that only some 200 + members take advantage of our various programs such as coming out on field trips, attending talks and workshops, or volunteering on various committees. The OFNC is only as effective as its membership allows it to be, and it is clear to us that with more people actively involved, we could expand and improve upon what we do.

So what **do** we do?

We have updated our logos, and a committee is working on revamping our webpage.

On April 2nd, we had our yearly party to honour those who have made a positive impact on our Club or in the Ottawa District. (See the article on page 98.)

Conservation Committee members have been commenting on recovery plans for Snapping, Blanding's and Spotted Turtles and have submitted a document concerning the recognition of the American Eel as a species at risk.

Safe Wings Ottawa continues to make news as Anouk Hoedeman and committee members gather up dead and injured migrating birds and continue their task of educating all of us about what we could do to mitigate this tragedy. To this end, they were just awarded a grant from the Community Foundation of Ottawa to research best practices for safeguarding migrating birds in urban areas and to communicate this to us all.

The Fletcher Wildlife Garden volunteers are gearing up for another active season as I write. A Wednesday evening group organized by Diane Lepage (dlepagehibou@sympatico.ca) focuses on the Butterfly Meadow; a Friday morning Backyard Garden Group is guided by Isabelle Nicol (izzy777@rogers.com & 613-820-1406); Sandra Garland (webmaster@ofnc.ca), who is key to the success of our annual Native Plant Sale (Sat., June 4th 2016), has a Tuesday afternoon group, and there are other possibilities for individual projects at all levels of expertise. happily and productively employed, are learning in the process, and, perhaps, What is really needed is a Volunteer Coordinator to make sure that all volunteers are happily and productively employed, are learning in the process, and, perhaps, making new friends. Are there any takers out there?



Digging in the Fletcher Wildlife Garden. Photo by Diane Lepage.

With the goal of getting more children engaged in outdoor learning, we have entered into an agreement with the Ottawa Carleton District School Board (OCDSB) to provide buses to the MacSkimming Outdoor Education Centre and the Bill Mason Outdoor Education Centre for schools that lack the necessary funds for such activities. This agreement was brokered by Lynn Ovenden, Education and Publicity Committee.

We aim to stimulate research on field-based natural science projects by awarding small grants to individuals to defray expenses. Some of the results have already been published, such as William Halliday's article on common gartersnakes [*T&L*, 50(1): 9-14] and David Seburn's work on salamanders [*T&L*, 50(1): 15-17]. (See our webpage, ofnc.ca, for more details.)

Friends of the Farm plan to publish *Blooms: A History of the Gardens at Ottawa's Central Experimental Farm*, and OFNC made a donation towards its publication.

Several Club members participated in the City of Ottawa citizen science event on April 12th.

Our team of Lucy Patterson and Kathy Conlan adjudicated and presented awards to the creators of three very deserving natural science projects at the recent Ottawa Regional Science Fair.

We are proud to report that on Earth Day, the OFNC was presented with a Biodiversity Award from St-Laurent Academy and St-Patrick's High School. We received this lovely recognition together with David Suzuki.

Our Board meetings are held at the Fletcher Wildlife Garden Interpretation Centre, usually on the 3rd Monday of every month except for July and August. Members are always welcome to attend as visitors, and may present agenda items for discussion by prior arrangement with the Chair.

New OFNC Logo and Brand

Mark Brenchley

For some time now the Education and Publicity Committee of OFNC has been considering ways to enhance the visual communication of the club, both internally to our members and externally to our target audience and potential members.

Last year the website working group started the process of creating a whole new website. With a similar goal of improving club communication and identity, these two projects joined forces. We explored many ideas and designs until we reached the conclusion that we didn't need or want a completely new look, but simply a revision of the logos we had been using. There will be enough changes coming with the new website, and we wanted our familiar owl to welcome members, and non-members too, when the new site is launched, and wherever else the logo is displayed.



Ottawa Field-Naturalists' Club
Club des naturalistes d'Ottawa

Vs



Above is the new official club logo on top of the one it replaces. The owl has been revised, making it clearer and with better defined plumage and eyes, and now it perches on a branch rather than an N. The font is more contemporary, open and

welcoming. By presenting our full name in both official languages, we are opening our doors more inclusively. Green seemed the “natural” colour of choice for the font to complement our B&W owl.

The OFNC is a club, and we have added that word to the logo to reinforce that distinction to everyone. We are an organisation that is open to all, we share common interests, we do this primarily in our leisure time, and we do it for fun.



Here are four other approved logos that will be used in situations that don't require the official logo, or where they are graphically more suitable. Common owl, font, colour makes them all easily recognizable as part of the “OFNC brand”.

The club brand is a cohesive set of graphic guidelines, specifying logos, colours, font to use: essentially a list of do's and don'ts for OFNC graphics. This is for all club members to use if they are creating anything using the club name and logo. A complete set of new logo files, in many formats, will be available on the website shortly, as well as the OFNC Brand Guide.

By all of us using the same logos, in the same fashion, for all future club communication, we strengthen the brand. In doing so we hope to strengthen the club, and make it more easily recognizable in the wider community, for all the activities and initiatives we undertake.

We include a newly minted OFNC sticker to help get the new look out there. It is suitable for application, indoors or out, for you to show your pride in our club. Please display it wherever you feel is appropriate.



National Capital Commission and Partners Protect the Ecological Integrity of Mud Lake

The National Capital Commission

The National Capital Commission (NCC) has launched an invasive vegetation management project at Mud Lake, from fall 2015 to fall 2017. Mud Lake, located on the south shore of the Ottawa River east of Britannia Bay, is one of the most ecologically important urban natural habitats in Canada's Capital Region.

This conservation area is habitat to at least 18 invasive plant species. Invasive non-native species are a threat to biodiversity. They can reduce or displace native species and change ecosystem function. The primary species of invasive plants found on the site are the following:

- Glossy Buckthorn and Common Buckthorn (*Frangula alnus* and *Rhamnus cathartica*)
- Norway Maple (*Acer platanoides*)
- Garlic Mustard (*Alliaria officinalis*)
- Honeysuckle (*Lonicera tatarica* and *Lonicera morrowii*)
- Dog-strangling Vine (*Cynanchum* sp.)

The NCC, with the help of volunteers, is mechanically removing pre-identified invasive plant species in selected areas of Mud Lake. Forty-five students are participating in this project thanks to a partnership with Regina Street Public School. The control and eradication of invasive plant species will contribute to the protection

of significant plant species and, as a result, the conservation of urban biodiversity in the capital region. It will also help preserve the ecological integrity of Mud Lake's natural environment.

More on Mud Lake:

Mud Lake is a 60-hectare complex of wetlands, the majority of which is made up of deciduous swamp forest. The driest part, to the west, contains a mature forest stand which is mainly comprised of white, red and burr oak, as well as white pine. It is found within the Lac Deschênes Ottawa River Important Bird Area.

This site hosts about 40 plant species that are known to be regionally or provincially significant. Over 200 bird species have been observed, along with numerous species of amphibians, reptiles and fish that are not commonly found either regionally or nationally.

If you would like to volunteer in the Mud Lake vegetation management project, please visit our website ncc-ccn.gc.ca/about-ncc/volunteer-centre/volunteer-mud-lake, or contact the NCC Volunteer Centre at 613-239-5373, email: volunteer_benevoles@ncc-ccn.ca.

For more information about Mud Lake, please visit our website ncc-ccn.gc.ca/places-to-visit/parks-paths/mud-lake.

Flora of Gatineau Park: Project Summary

Jean Faubert, Société québécoise de bryologie

Alexandre Blain, FloraQuebeca

Jennifer Doubt, Canadian Museum of Nature

Note from the editor: This research was funded in part by an OFNC Research Grant.

For the past two years, a non-profit, botanical collaboration has been underway in the Outaouais. Its primary objective is to establish the most comprehensive list possible of the plants of Gatineau Park and its immediate surroundings. *All* green plants, i.e., vascular plants and bryophytes (mosses and associated groups), are included in the project; this inclusive approach is uncommon in the natural sciences world.

The main product will be a publication, in both paper and electronic formats, presenting all of the Park's flora. Significant space will be devoted to illustrations,

preferably photographs, but also scientific drawings. It will be offered in both official languages.

The Ottawa Field-Naturalists' Club, by supporting the project in 2015, joined six other organizations in the endeavour:

- The National Capital Commission
- The Canadian Museum of Nature
- FloraQuebeca
- The Friends of Gatineau Park
- The Société québécoise de bryologie
- The Centre local de développement des Collines-de-l'Outaouais

The first year of the project (2014) was devoted to gathering knowledge from literature (often unpublished and difficult to access), and from herbarium collections at the Canadian Museum of Nature, at the Agriculture and Agri-Food Canada Collection of Vascular Plants, and at the Société québécoise de bryologie. Subsequently, 2015 was devoted to field work in order to complete and validate the data. The following figures show that the collective (and strictly voluntary) effort was significant:

- 14 people participated
- 67 field trips took place
- 290 hours were spent in the field
- 679 person-hours of work were carried out.

Hundreds, if not thousands of photographs were taken, which will initially provide a bank of images to be used in the preparation of the publication.

The 2015 fieldwork added 60 taxa (31 vasculars, 29 bryophytes) to the known flora of the park, which we now know to be home to 1,250 plant taxa (949 vasculars, 301 bryophytes). As a result, Gatineau Park now boasts one of the best recorded floras in the province of Quebec. Furthermore, we have shown that Gatineau Park, particularly the Eardley Escarpment, is a hot spot of floristic diversity and rare plants: our inventories have documented 99 rare taxa (90 vasculars, 19 bryophytes) so far. Some species are known in Quebec only from occurrences in the Park, for example, the Fan Moss (*Forsstroemia trichomitria*) and the vascular Narrow-leaved Moonwort (*Botrychium lineare*).

The discovery, in 2015, of a large number of taxa that were previously unknown for the park signals that additional species of conservation significance are likely to be found with additional search effort. Therefore, project managers have decided to conduct further fieldwork in 2016 that was not originally planned. Although this will delay future milestones, the floristic richness encountered to date makes it an important extra step.

When the publication is complete, no Quebec territory, whatever its legal status, will offer such comprehensive knowledge about its floristic diversity.

To learn more:

Faubert, J., 2013. Les bryophytes : un aspect important de la diversité floristique du Parc. – Bulletin des Amis du Parc de la Gatineau 2013-2 : 3-4.

Société québécoise de bryologie, 2015. Bryophytes du parc de la Gatineau et de ses environs. – Lepagea, no 7, 9 pages.

http://societequebecoisdebryologie.org/Lepagea/Lepagea_7_Gatineau.pdf



Large Purple Fringed Orchid



Cat-tongue Liverwort



Wavy-leaved Broom Moss

Bee it ever so Bumble, there's No Place Like Home

Jack Holliday

There is a colony of bumble bees under our front verandah. It is underground and probably in an abandoned mouse nest. Queen bumble bees, in their search for a suitable place to establish their colony, often select a mouse nest with grasses for support. I had noted the workers coming and going all summer. More and more, in the absence of honey bees in the city, we rely on bumble bees to pollinate our fruit trees, tomato plants and flowers.

In September, the colonies have raised next year's "queens" and "drones". Soon they will mate, and the queen will search for and select a place to overwinter. At least some of the queens will hibernate in the "nest."

The animals which have homes, must, of necessity when they venture to leave that home, know how to return to it. We humans have a fear of becoming lost for good reason. Some of us have nighttime dreams of becoming lost in a strange city, and we have the pleasure of awaking safe in our own beds in our own homes. The young virgin queens venture outside - but first they must establish a memory of how to return home. If you can watch you'll see them doing a flying search for landmarks to remember. Their first few flights are only of 10 feet or so and only inches above the ground while they reconnoiter the area and seal "land markers" in their memory before returning to their home. Subsequent flights are farther and higher, 20 feet distant and five or so feet above the ground. They circle and examine prominent items, the concrete steps, the crab apple tree, the porch structure.

Most people are concerned that the zooming bees are a menace, and are afraid of being stung, but the bees are not a danger unless they accidentally get caught inside one's clothes. The queens are remembering how to return home and they ignore the people. After numerous flights, the whole neighbourhood is "known".

Few of us are expert on the lives of bumble bees, but I have read that they make a few cells to store nectar or pollen, probably enough to maintain some queens through the winter? The workers and drones die off.

Each spring the new queens must search for suitable sites to establish their own colonies. The bumble bees pollinating your apple tree in May will all be queens and probably have not yet found a nest site. So we must appreciate their appearance, and if a queen finds a place to make a home close to yours, please refrain from "raid"ing it.

Be it ever so humble, there's no place like home.

John Howard Payne (1791-1852) wrote a beautiful, haunting song, popular at the turn of the 20th century, so your grandmother may know of it. Two lines from that song go as follows: "Mid pleasures and palaces though we may roam / Be it ever so humble, there's no place like home." With apologies to the author, I've paraphrased his line for the title of this article.

Recovering Numbers of Monarchs

Jack Holliday

There are three Buddleia shrubs in our garden, the variety with white blossoms. They grew from cuttings I obtained from a neighbour's plant. You may know that the blossoms are a magnet for butterflies, especially migrating Monarchs. They "refuel" at blossoms, five minutes or so, then fly away on their journey to Mexico.

It is wonderful to see the butterflies, overhead, turn back and cycle down to the flower. In 2015 they were arriving in record numbers; in the previous five years we had seen only a few. The first one I noticed was on August 28. After that I saw some every day. Most days, like September 18, I saw about 10. For every one I noticed, there are probably two or three that come and go. On September 20, I counted six before 10:00 am.

Last year I grew from seed 50 Buddleia plants; neighbours, friends and family have planted them in their gardens. I have a thought: Wouldn't it be wonderful if there were a continuous corridor of Buddleia from Canada to Mexico? That would insure "fuelling stations" for Monarchs on their long journey.

Their normal food plants in this area in September to October are wild purple asters, golden rod and other wildflowers. Farmlands in Canada/USA provide many nectar sources. The cities are a problem: miles of concrete and no nectar sources. City gardens can grow Buddleia to provide for the monarchs.

There may be another problem. Will the introduced plants become invasive weeds? Canada and the U.S.A. have over the years introduced plants accidentally, and on purpose, which have become pests (think of thistles and burdock).

Buddleia is available at some garden centres. Seed is available from Stokes for one. Cuttings from existing plants are easily propagated.

And so, if you want to see and help the Monarchs, by all means grow a Buddleia (or two). You'll be pleased with the arrivals and departures of Monarchs—and perhaps Red Admirals, Tortoiseshells, and a host of bumble bees.

Squirrel Wars - the Farce Awakens

Roy John

A long time ago, in a place far, far away, I realised that birds needed a place to flee from imperial forces (like hawks). My garden at the time was as plain as a soccer field with tiny, newly planted shrubs, so my boys were coerced into collecting discarded Xmas trees. Placed around the feeder like a hedge, they worked well and encouraged plenty of birds.

Some years later I set up in Ottawa, with its multitude of cedar hedges, and my feeders attracted many species. Soon, however, they pulled in Red Squirrels, and these drove off all the birds. Gordon Pringle, a wise and knowledgeable feeder master, advised me to get a "squirrel-proof" feeder, so I went to Lee Valley and bought a green barn feeder with spring-loaded perches. I filled it full of sunflower seed and welcomed back House Finches, Goldfinches and many other birds. Then two years ago it all changed with the arrival of Darth Squirrel.

Despite the swishy red, fur cloak and the bold eyes, this was a creature of pure malevolence. He promptly terrified the entire neighbourhood. No squirrel, bird, wookie, Jawa or other being was allowed in the local feed station. Any intrusion was met by unmitigated violence. Gone were my lovely Cardinals, cute Chickadees and other interesting visitors.

I watched with amusement as he tried to get seeds from my "squirrel-proof" feeder. He managed to get the odd seed, but his weight closed the gate. Then he learned to leave his weight in a bush and stretch across the feeder edge. So I cut back the bushes.

Darth Squirrel tried climbing up the support pole and reaching around the lip of the feeder.

This way he could scoop seeds without touching the perch.

I greased the pole. Darth Squirrel avoided the pole and used the force to fly though the air for many metres and land on top of the feeder. I tried adding weights to the perch, but this made no difference. For Darth Squirrel had worked out he could hang on the perch pivot and leave his weight on the outside. He could then reach in with one paw and eat to his heart's content.



The Evil Darth Squirrel

I opened the kitchen window and shouted, and Darth flew back to his cedar battle-station. Soon this technique failed so I started using a water blaster. He got many soakings until he used the "tail" of his red cloak to cover his head. With this deflector shield up he could again eat with impunity.

I bought two new feeders: tube types with a spring controlled outer sleeve. I filled one with peanuts and one with mixed seed and waited with anticipation. The next morning the seed feeder was broken and seed was all over the ground. The damage was from the (light) sabre teeth of Darth Squirrel. The manufacturer quickly replaced the parts and it is still in operation. The peanut feeder has more-or-less regular visits by Downy Woodpeckers, and the seed feeder pulls in House Sparrows.

I still missed the finches so I re-filled my "squirrel-proof" Lee Valley feeder, but I stirred in a prodigious quantity of chili powder. Darth Squirrel soon returned and, although he fed for minutes rather than hours, he did feed regularly. The birds stayed away.

So we bought a new "squirrel-proof" feeder. It was a tube I filled with sunflower seed, covered by a cage with a small mesh. It sat for a month with only a couple of visits from Goldfinch. Then we saw a mass of husks and the seed level had dropped by a third. We watched the feeder until we saw Darth Squirrel inside the "squirrel-proof" cage eating away.

I brought the feeder inside and added some cross wires to make it difficult to move inside the cage. Darth Squirrel was soon back inside. I sneaked around to the feeder area. As soon as the squirrel saw me he went into panic mode, but getting out was not easy. I struck the cage with my black light sabre (aka a broom pole), sending him into total retreat.

I found one hole was bigger than the others, and I blocked it with wire. We watched and saw Darth Squirrel poke his head through a small hole, but his shoulders were too big. He wriggled his front foot through, then pulled in his other foot and he was in. Houdini would have been impressed. I repeated my black light sabre attack every time I saw him inside. Despite doing this several times, he still persisted in ravaging my bird food supply.

So I again re-filled my "squirrel-proof" Lee Valley feeder, but I stirred in a prodigious quantity of powdered peppermint candy – squirrels hate peppermint. Not Darth Squirrel, he enjoys peppermint-flavoured sunflower seeds.

A work colleague once took the ultimate action – a small-bore rifle. He gave up after he had shot 22 squirrels in 22 days.

My son (who works for the RCMP in Yellowknife) finally explained in cop-speak that I actually have "allegedly squirrel-proof feeders." The war continues – stay tuned for Episode VIII.

Windfall

Linda Jeays

I lift up my chin
still wet with juice
& apple-dappled sunlight
brushes me with leaf shadows.

I hold my breath...
tears are not enough.

OFNC Bird Records Sub-committee (BRSC) - Activities 2015

Rémy Poulin

The BRSC is a sub-committee of the OFNC Birds Committee with a mandate to maintain a database documenting significant avian occurrences in the OFNC Study Area and assure the credibility and integrity of those records. The BRSC actively solicits reports for this purpose and decides which occurrences are sufficiently documented to merit being included in the Bird Checklist for Ottawa. That document was updated this past year and published in December as the *OFNC Ottawa District Bird Checklist – 2015*.

The BRSC encourages documentation of any sighting in the OFNC Study Area – defined to be a circle with a radius of 50 kilometres centered on the Peace Tower – of a bird species either identified as “Rare” in the Checklist or not included in that list. The Rare Bird Report form can be completed online at <http://www.ofnc.ca/birding/bird-records.php#rarebirds> or a PDF version can be downloaded and mailed. The website also provides information on how to complete a report.

The BRSC members for 2015 were:

- Bernie Ladouceur - Chair
- Bev McBride - Recording Secretary
- Bruce Di Labio
- Marcel Gahbauer
- Mark Gawn
- Christina Lewis (Alternate)
- Jon Ruddy
- Jeff Skevington
- Michael Tate (Alternate)
- Daniel Toussaint
- Chris Traynor (Alternate)

Brief Summation of BRSC Activities for 2015

The BRSC met in October 2015 to review Rare Bird Reports. However, given that the updated Checklist was scheduled to be published before the end of the year, it was decided to focus on those Reports that would potentially impact that Checklist. Consequently, three of these Reports reviewed were historical in nature and a number of other Reports were deferred for review in 2016. Three species were seen in the Study Area for the first time ever in 2015: Little Egret, Bullock's Oriole and Mountain Bluebird. This brings the total number of species on the Checklist to 363. It should be noted that the latter two species were recorded after the BRSC met in October but before the Checklist was published. Nevertheless, these birds were seen "in the field" by a quorum of the BRSC and provisionally accepted so that the species could be included in the updated Checklist. These records will be reviewed in greater detail again when the BRSC meets in 2016.

At the October meeting, Michael Tate was elected as the new Chair, replacing Bernie Ladouceur who will continue to serve as an Alternate member of the BRSC. In addition, Rémy Poulin was elected as the new Recording Secretary, replacing Bev McBride who is stepping down from the Sub-committee, as is Christina Lewis. These changes took effect at the adjournment of the meeting. Bev and Christina have been long time members of the Sub-committee (Bev since 2007 and Christina since 2003), and the BRSC would like to thank both of them for giving freely of their time to contribute to the work of the Sub-committee. A special thanks goes to Christina, who was instrumental in the effort to publish the 2015 Checklist.

A list of the Reports reviewed in 2015 follow and are arranged by English and scientific names in accordance with the seventh edition of the *American Ornithologists' Union Checklist of North and Middle American Birds* and its

56th supplement (2015). The BRSC has made every effort to verify documentation prior to acceptance and publication of a record, but the possibilities of errors or omissions remain. The Sub-committee welcomes written communications that would either correct or reinforce any record. These may be forwarded electronically to OFNC.BRSC.Secretary@gmail.com or by mail to:

The Ottawa Field-Naturalists' Club
Box 35069, Westgate P.O.
Ottawa, ON K1Z 1A2
Attention: Bird Records Sub-Committee Recording Secretary

ACCEPTED REPORTS

This list of accepted reports includes new Reports as well as deferred ones where new documentation or evidence is now available. The Report writer's name(s) is underlined and *Finder's Name(s)*, when known, is in italics.

Fulvous Whistling-Duck

Dendrocygna bicolor

- 1964 - Mid September, Québec, Ottawa River near Thurso; *J.C. Wilson*. Reports of a number of individuals in the same area over successive years (1964, 1965 and 1966). These observations were briefly summarized in Volume 81 of *The Canadian Field-Naturalist* (1967) pages 151-152.

Barnacle Goose

Branta leucopsis

- 2015 - May 3, Ontario, Kinburn, island in the Mississippi River; Richard Waters. Two individuals. The birds were seen by a number of observers later that day and the next.

Little Egret

Egretta garzetta

- 2015 - June 2, Ontario, Carp, along the Carp River; Michael Tate, *Ben Di Labio*. Photos available. This was a first record for Ontario. The bird was subsequently seen a number of times in the local area until about mid-July.

Yellow-crowned Night-Heron

Nyctanassa violacea

- 2015 - May 23, Ontario, Ottawa, Abbeywood Court; Michael Tate, *Mary Connelly*. Photos available. The bird was seen on and off until June 8.

White-faced Ibis***Plegadis chili***

- 2015 - June 2, Ontario, Ottawa, Giroux Rd ponds; Michael Tate, Greg Zbitnew. Photos available. The bird was seen only that day.

King Rail***Rallus elegans***

- 1965 - Early June, Ontario, Ottawa, Shirley's Bay; Monty Brigham. The sighting was documented in the column "Bird's Eye View" of the *Ottawa Journal* on June 19, 1965. That column also reported that the bird was subsequently seen by other observers on June 13.

American Avocet***Recurvirostra americana***

- 2015 - June 21, Ontario, Ottawa, Pinecrest Creek; Nina Stavlund. The bird was seen by many observers over the next few days and was last seen on June 27.

Long-tailed Jaeger***Stercorarius longicaudus***

- 2015 - September 19, Ontario, field off Highway 31 north of Winchester; Mark Gawn, Stephen Gawn. Photos available. The bird was seen again the following day.

Burrowing Owl***Athene cunicularia***

- 1991 - April 19, Ontario, Arnprior; Michael Runtz, Eric Ridgen. This report was accepted by the Ontario Bird Records Committee but was not originally considered by the BRSC as it was thought that the location was outside of the Study Area. It was reconsidered and accepted by the BRSC in 2015 when it was determined that one of the locations where it was observed was, in fact, just barely in the 50-km circle.

Blue-winged Warbler***Vermivora cyanoptera***

- 2015 - September 8, Ontario, Ottawa, Britannia Conservation Area; Gary Milks, Sue Milks. Photos available.

Le Conte's Sparrow***Anmodramus leconteii***

- 2015 - October 5, Ontario, Ottawa, Andrew Haydon Park; Roy John, Dave Moore, Marilyn Ward. The bird was not re-located.

UNACCEPTED REPORTS

The documentation submitted for the following reports, while in some cases detailed, was still found to be insufficient to conclusively rule out any other

reasonable possibility. If additional documentation is received, these reports will be revisited.

- 2015 - Manx Shearwater (*Puffinus puffinus*), June 27, Ontario, Ottawa, Chaudière Bridge.
- Cassin's Kingbird (*Tyrannus vociferans*), September 8, Ontario, Ottawa/Mississippi Mills, Burnt Lands.

A special thanks to all who took the time to prepare and submit a Rare Bird Report. Your effort is much appreciated by the Bird Records Sub-committee.

Spread of European Water Chestnut (*Trapa natans* L.) to the Rideau River in Ottawa

Holly Bickerton

The invasive, non-native European Water Chestnut (*Trapa natans* L.) was first observed in Ontario in 2005, in the Ottawa River at Voyageur Provincial Park, near Hawkesbury (S. Macdowell-Stewart, pers. comm., Lui et al. 2010). Within a few seasons, the species dominated the surface of Iroquois Bay and Champlain Bay – both long, sheltered embayments with muddy substrates. Before intensive control efforts began to have an effect, this population had spread to four large bays at Voyageur Provincial Park, with two of these bays almost entirely covered in floating rosettes of Water-chestnut leaves (S. Macdowell-Stewart, pers. comm.).

In 2006, a spiky fruit of European Water Chestnut was found on the southern shoreline of Wolfe Island (Dan Brunton, pers. comm.) and by 2011, patches had been confirmed in two bays on the island (Justin White, pers. comm.). Until recently, these localized occurrences were thought to be the only populations of European Water Chestnut in Ontario. Then, in the fall of 2014, staff from Environment Canada found a patch of European Water Chestnut in the Rideau River at Black Rapids (approximately at Prince of Wales Dr. and Fallowfield Rd.) in southern Ottawa. Late in 2015, Ducks Unlimited Canada staff discovered another small population in Kingston harbour along the north shore of Lake Ontario (J. White, pers. comm., 2016). It is also now frequent in upstate New York along the south shore of Lake Ontario, and directly across the lake from Wolfe Island (Weldy et al. 2016). It appears that European Water Chestnut is on the move in eastern Ontario.

European Water Chestnut is an annual plant in the Lythraceae or Loosestrife family, and is native to Eurasia and Africa. It was introduced to North America over a century ago into several Massachusetts ponds by the gardener of the Harvard University Botanic Garden. Reporting newly naturalized populations, prominent 19th century New England botanist George Davenport declared "...that so fine a plant as this, with its handsome leafy rosettes (...) can ever become a "nuisance", I can scarcely believe" (Davenport 1879). Davenport himself was enthusiastic enough about the plant to spread the nuts to other ponds in the area. Sadly, since these initial introductions, European Water Chestnut has indeed spread to nuisance proportions in waterbodies across much of the northeastern United States, parts of southern Quebec and now, southern Ontario (Marsden and Hauser 2009; Simard et al. 2009).

Resembling none of our native aquatic plants, European Water Chestnut is very easy to identify. The unusual and distinctive – some might even say "handsome" – floating rosettes of triangular or ovoid toothed leaves can reach 30 cm in diameter (see photos, or Crow and Hellquist 2000 for a botanical illustration). Along the leaf petiole is a length of swollen spongy tissue, which provides buoyancy. Small, four-petalled white flowers arise from the centre of the rosette in summer, and mature into large, hard, nut-like, barbed fruits. Although the nuts are edible, the European Water Chestnut is not the "water chestnut" of Asian cuisine, which is the fruit of an *Eleocharis*. Each rosette can reportedly produce 15-20 nuts, borne on stalks below the rosette. Once these heavy nuts fall to the substrate, they can remain viable for 8-10 years. However, experiments at Voyageur Provincial Park have shown that approximately 95% lose viability within four years (S. Macdowell-Stewart, pers. comm.).



Floating rosette of European Water Chestnut (E. Snyder)

The ecological impacts of European Water Chestnut are significant. Under ideal conditions, the densely arranged floating leaves cover almost the entire water surface, shading out native floating and submerged aquatic plants. Low light penetration through the water column results in decomposition of native submerged plants, as well as decreased dissolved oxygen and dissolved organic carbon levels. The displacement of aquatic plants and changes to nutrient and oxygen levels can cause a reduction in diversity and loss of fish and other aquatic animals (see summary in Hummel and Kiviat 2002). Dense infestations of European Water Chestnut also interfere with boating, fishing, swimming, and water quality. The sharp, spiky nuts are a human hazard on beaches, where they can wash up.

Plants may spread in several ways. Perhaps most commonly, rosettes break off, drift into new areas, and re-root in the substrate. The barbed nuts can also float for short distances, or attach to mats of other plant material that may drift farther on water currents. Nuts or rosettes can both be inadvertently transported by boats. Waterfowl – especially Canada Geese – may transport nuts that can readily become entangled in their breast feathers. Although European Water Chestnut is no longer for sale in Ontario, it is also possible that some populations may have escaped independently from water gardens.

Once established over a large area, European Water Chestnut is a costly challenge to control. At Voyageur in the 2015 season, two custom “cutter boats” and a dedicated crew of 16 seasonal staff cleared rosettes over 59 acres of surface coverage (S. Macdowell-Stewart, pers. comm.). A floating barrier approximately one kilometre in length is installed annually to contain the main infestations while they are being cut. Plants are mechanically cut, and then hand-raked and manually removed for composting. Control efforts over seven years have eliminated all new seed production in some areas of the park, and large reductions in rosette coverage are at last becoming evident.

Because the Black Rapids population was identified early and covers only a small area, it’s hoped that it can be completely eradicated with sustained effort. In 2015, staff at Ducks Unlimited Canada, the Rideau Valley Conservation Authority (RVCA), and the City of Ottawa combined forces to control European Water Chestnut in the Rideau. Many volunteers assisted by hand-pulling plants. Despite the fact that this population was limited to a 60 x 30 foot patch, over 2700 kg of plant material was removed, demonstrating just how much biomass this species is capable of producing in a short time (J. White, pers. comm; Dodd-Moher et al. 2015). In 2016, the area will be monitored and at least two more control days will be organized by the RVCA, City of Ottawa and Ducks Unlimited Canada. Ongoing monitoring and hand-pulling will be required for several years, until any seed bank that may have become established is exhausted.



*Underside of the rosette, showing spongy tissue, and a developing nut
(H. Bickerton)*



*Top view of the nut, found on Wolfe Island in 2005.
(D. F. Brunton)*

In the coming seasons, watch for this distinctive aquatic plant or its nuts in waterways and along shorelines in eastern Ontario, perhaps especially in the Rideau, Cataraqui and Gananoque River systems. Slow, sheltered, nutrient-rich bays with relatively shallow water (8-10 feet) provide the most likely habitat for this species to establish. This is the same habitat that encourages the growth of the long established and equally problematic aquatic invasive plant, Frog's-bit (*Hydrocharis morsus-ranae*). Any observations should be reported without delay to the Ontario Invading Species hotline, or to the RVCA or Ducks Unlimited Canada (see numbers below). When populations are newly established and small, the chances of containment and eradication are highest.

For those who like to get their hands dirty, two control days are being planned at Black Rapids in 2016, likely on July weekends. The success of last year's efforts is still unknown, but volunteers (and possibly canoes) will probably be needed to help with removal. Watch the OFNC website or contact the RVCA for further information. Two volunteer days are also being planned at Voyageur PP in the summer of 2016, and visitors are welcome at any time to help with hand pulling. Canoes are available from park staff.

- To report observations, call OFAH's Invading Species Hotline: 1-800-563-7711, or email via www.invadingspecies.com
- To volunteer at Black Rapids with City StreamWatch, contact Justin Robert (RVCA) at 613-692-3571, Ext. 1194, or Justin.robert@rvca.ca
- To volunteer at Voyageur PP, or for more information on control efforts there, contact Sabrina Macdowell-Stewart at 613-674-2825, Ext. 224 or Sabrina.macdowell@ontario.ca



*Iroquois Bay, Voyageur Provincial Park, August 2011
(H. Bickerton)*

Acknowledgements

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The Mite-y Bee: Mites Associated with Bumble Bees

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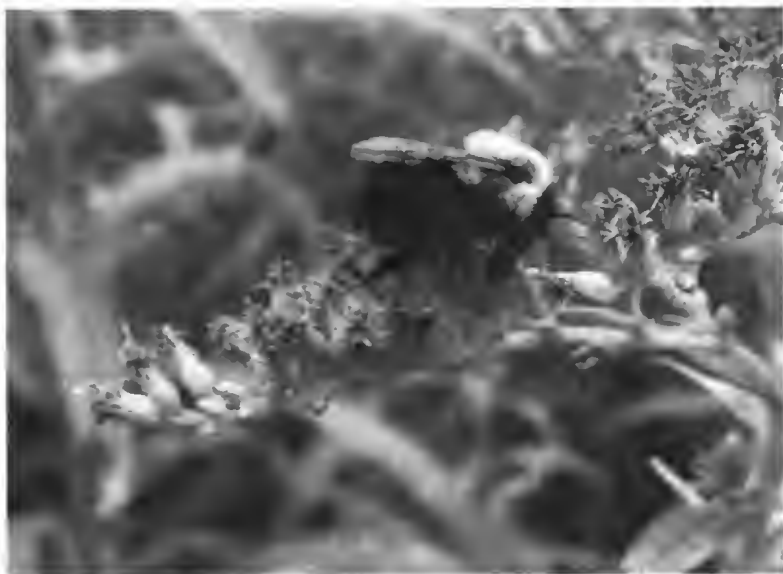
Bees are important pollinators of both the world's agricultural and natural systems. As with many insects (Eickwort 1990), bees host their own community of associates that can range in their effect from highly detrimental to beneficial. Many of these associates are mites, a group that is poorly studied. Parasitic mites have received the most research attention, given the damage done by the best-studied bee-associated mite, *Varroa destructor*, and the agricultural importance of its host, the European Honey Bee (*Apis mellifera*) (Le Conte et al. 2010, Di Prisco et al. 2011). Aside from honey bees, several bee taxa have associated mites of various species, and while some of these are detrimental to their bee hosts, far more are thought to have either a neutral or positive effect (Eickwort 1994). These mites are poorly studied, but they provide an excellent system for investigating processes of ecological community assembly. Understanding bee-mite interactions is also important for learning the effects they could have on ecosystem services provided by bees.

In the Ottawa area, bumble bees (*Bombus*) have some of the most abundant and diverse mite communities of any bee groups (personal observation). These bees thus provide an excellent sample to study the effects of the host community and the environment on mite communities. In addition, our lack of knowledge of most mites associated with bumble bees is such that it is unknown which mites are found in the area. In fact, several of our local bumble bee species have not previously been sampled for mites anywhere in their range. This alone makes my survey an important and interesting investigation. However, the purpose of my research is to determine how both the environment and host bee community affect the mite community of bumble bees.

While the lifecycle of most mites associated with bumble bees is not well known, a general lifecycle in relation to their bee hosts can be constructed from mites that are better documented, such as *Parasitellus talparum* (Richards and Richards 1976). In temperate environments, bumble bee colonies have an annual lifecycle in which queens start colonies in the spring, and all but the newly emerged queens die before winter. While their mite associates feed and breed only in the bumble bee nests, the mites cannot survive the winter unless they are attached to a live queen bee. Thus these mites hibernate with and emerge with the queens. After the winter, mites

spend most of their time within the bee nest, though not always the nest of the bee they overwintered on. Some mites will switch between queens while the queens forage, using flowers as “stepping stones” between bees. Once the queen’s daughters are old enough, these worker bees take over the foraging. This provides mites with the opportunity to disperse between established colonies by attaching to workers in the nest and then using flowers to switch between bees. At the end of the season, mites attach to young queens so as to survive the winter; however, they will also attach to the newly emerged males. In this way they can transfer from males to queens of other colonies while the bees mate. It’s during these dispersal stages where mites are non-feeding and attached to bees that I can most easily sample the mite community.

To do this, I conducted bumble bee surveys between May and October 2015 in the Ottawa area. I sweep-netted bumble bees at 15 sites along a land-use gradient between Ottawa and Casselman for 15 minutes once a week. Bumble bees were immediately placed into vials of 90% ethanol so as to retain all mites associated with each bee. Bees were pinned and identified to species. All mites found within the ethanol vials and on the bees were identified to species when possible, and in some cases to genus. Where necessary, a subset (generally 10-30%) of similar mites would be slide-mounted in polyvinyl alcohol (PVA) for more precise identification. All specimens will be deposited in the Canadian National Collection of Insects, Arachnids and Nematodes.



Worker Common Eastern Bumble Bee (Bombus impatiens) on goldenrod (Solidago sp) in Ottawa, Ontario

Over the course of the field season, I caught 1,856 bumble bees representing 11 species. Of these, there were 1,089 Common Eastern Bumble Bees (*Bombus impatiens*), 232 Red-belted Bumble Bees (*B. rufocinctus*), 201 Half-black Bumble Bees (*B. vagans*), 106 Tri-coloured Bumble Bees (*B. ternarius*), 99 Brown-belted Bumble Bees (*B. griseocollis*), 76 Northern Amber Bumble Bees (*B. borealis*), 31 Two-spotted Bumble Bees (*B. bimaculatus*), 9 Yellow-banded Bumble Bees (*B. terricola*), 8 Lemon Cuckoo Bumble Bees (*B. citrinus*), 5 Confusing Bumble Bees (*B. perplexus*), and 2 Yellow Bumble Bees (*B. fervidus*). Associated with these bees, I found a total of 10,423 mites representing 34 species and 12 families, including acarids, scutacarids, and parasitids. These mites generally fell into one or more of the following feeding strategies: (1) feeding on stored provisions (pollen and nectar), (2) scavenging (fungi and detritus), and (3) predatory (mostly other mites and nematodes) (Hunter and Husband 1973, Richards and Richards 1976, OConnor 1992, Eickwort 1994, Okabe 2013, Zamec 2014). Those following the first feeding strategy are potentially harmful to bees, while those in the second category would be potentially beneficial. Mites in the third category could have positive, negative, or no effects on bees, depending on the identity of their prey.



Slide mount of Parasitellus talparum mite found on a Common Eastern Bumble Bee (Bombus impatiens)

While the majority of my bees (almost two thirds) had no mites, I observed a large range in the abundance of mites per individual bee. About half of the bees with any mites had between 1 and 10 mites; however, several had hundreds, with one bee hosting more than 500 mites. In the cases where large numbers of mites were found on a single bee, most mites were of the same species, generally either acarids or scutacarids.

The average number of mites per individual was not consistent among bee species. Of those bee species with sufficient sample size for analysis, the Half-black Bumble Bee and Common Eastern Bumble Bee had the highest mite loads on average, while the Northern Amber Bumble Bee had on average the lowest. No mite species of sufficient sample size was found exclusively on any one bee species; however, this difference in average mite load per bee species supports the idea that certain bee species are preferred mite hosts.

Disproportionately large numbers of mites were also observed on relatively rare bee species, in particular the Yellow Banded Bumble Bee, Confusing Bumble Bee and Lemon Cuckoo Bumble Bee. This observation matches well with the results of a 2011 study (Cameron et al. 2011) that found higher parasite loads on bumble bee species with declining populations than on bee species that were stable. This could imply that mites either contribute to bee decline, or that mites do better on bees that are already less healthy.

The mite loads also varied depending on bee caste. Worker bees almost always had fewer mites than either males or queens of the same species. However, caste differences varied among bee species. The Common Eastern Bumble Bee and the Tri-coloured Bumble Bee had significantly higher mite loads on queens than males; however, the Half-Black Bumble Bee, Red-belted Bumble Bee and Brown-belted Bumble Bee all had equally high mite loads on both males and queens. The increased mite load on queens is consistent with a study by Huck et al. (1998), which found that mites moved from males to queens and chose queens more frequently than males or workers. The pattern I observed suggests that this caste preference is not identical between bee species.

While analysis is ongoing (in particular, I am still looking at how mite loads vary among sites and species), some preliminary conclusions can be made. First, mites associated with bumble bees are not specialized to individual bee species, but certain bee species are disproportionately "mite-y". Second, caste preference is not uniform across all bee species. My findings suggest that the loss of rare bee species could affect not only the flowers pollinated by these species, but also the mite community. Further analyses examining the entire mite community using multivariate statistics will add to our knowledge of species interactions at a landscape scale.

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Pseudoscorpions at the FWG

Barry Cottam

What does it take to get five naturalists to stand around marvelling at a pile of dead leaves? We weren't avoiding the OFNC Board meeting that night of June 15, 2015, even though the lovely weather could almost have justified it. No, instead, we were peering at slime mould or, more precisely, the wildlife living on the mould. It turns out that numerous very small yet rarely seen Arachnids had colonized the mould.

This was not my first view of these minute animals – that came just two weeks earlier. As an eager macrophotographer of the invertebrate world, I'm out with a camera on an almost daily basis shooting photos of whatever life I can find in our yard, at the Fletcher Wildlife Garden (FWG) and elsewhere. On May 28, a crane fly on our lower front porch became the subject of a series of photos – take lots, you're not wasting film anymore! – and on a closer look, I realized that this fly was not alone. No fewer than four pseudoscorpions had hitched a ride (Figure 1). Our resident crane fly expert, Fenja Brodo, soon corrected my initial guess that the fly was being parasitized – no, they were just hitching a ride, one of the pseudoscorpions' means of getting around, a process known as phoresy.

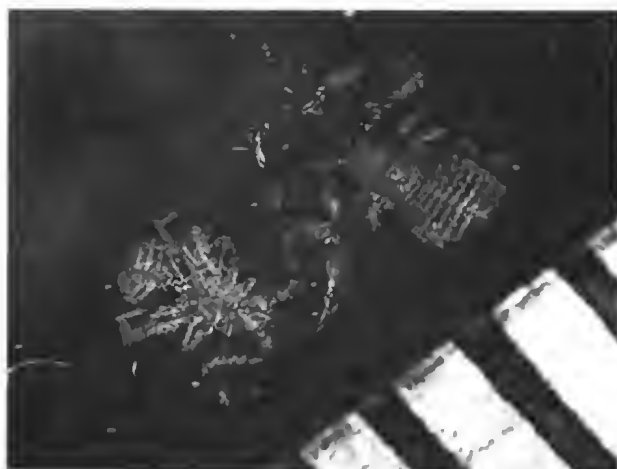


Figure 1: Four for phoresy: pseudoscorpions hitch a ride on a crane fly (B. Cottam)

The discovery of pseudoscorpions on the mould was equally fortuitous. I volunteer at the FWG and on June 6, when I noticed the mould growing on the leaf pile, went camera in hand to have a look. The mould itself, *Fuligo septica*, is interesting, and I've seen it several times before in similar

circumstances. This time, however, I was surprised to find that dozens of pseudoscorpions (I counted over 120) had taken up residence. Returning for the Board meeting a week later was my next opportunity to check them out, and this soon drew a crowd as other Board members arrived. Subsequent checks every few days revealed that the pseudoscorpions are more numerous on fresher moulds – more precisely, the fruiting body or aethelium – and also at warmer times of day. They were still around at my last inspection on July 6, though very few in number.

Taxonomically, pseudoscorpions are placed in their own order, Pseudoscorpiones, and share the class Arachnida with their close relatives, the more familiar spiders. They have been around for about 380 million years and live everywhere on Earth except Antarctica. Their hitchhiking (aka phoretic) mode of travel may explain some of this wide-spread distribution, but cannot explain it all. Almost 4,000 species have been identified worldwide, with about a tenth that number in North America. Chris Buddle of McGill University, one of the few students of these creatures in Canada, noted that only 5 species had been reported in Canada as of 1979, a number that grew by 1990 to 7 families and 23 species. However, this is an understudied area, and, in 2005, Buddle projected that 50 or more species may eventually be identified in this country.



Ventral and dorsal views of two of the pseudoscorpions. The ruler is in millimetres. (B. Cottam)

My – if I can put it that way – pseudoscorpions are most likely *Chelifer cancroides*, although precise identification is a matter for the specialist using carefully prepared specimens. But *C. cancroides* is a common species, widespread across Canada, so this amateur is willing to go with that designation. Sometimes called book or house pseudoscorpions, they can be found indoors where they apparently

do a good job eating up less desirable critters such as book lice, dust mites and small moths, among others. In fact, two of the five of us that night of the board meeting recognized them as something we had seen at home. They live in many other environments as well, no doubt a factor in their wide dispersal.

So what are they doing on slime mould? They most likely came in with the leaves, which the FWG gets delivered for use as mulch. *Fuligo septica* is a fairly regular sight around the FWG, and I've photographed it several times over recent years, but this is the first time I've seen it covered with pseudoscorpions. Just what they were doing there is impossible for me to say; perhaps all they were doing was enjoying the warmth of the sun. To learn more about them, check out the resources below.

NOTE: an earlier version of this article was previously published in the FWG Newsletter, July-August 2015.



Pseudoscorpions hanging out on a 'cake' of slime mould (B. Cottam)

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The Importance of Snags and Downed Logs to Wildlife

Christine Hanrahan

Introduction

Walking through our local forests and along trails at the city's edge, your eye may be caught by the stark form of a standing dead tree or by a fallen log stretched across the forest floor. Perhaps you have seen a woodpecker fly from a hole in the tree's trunk, or noticed a squirrel running along the log, using it as a sort of elevated highway through the forest, and recognized the value of this dead wood to birds and other forest creatures. To many people, however, standing dead trees represent a threat to their safety, or an eyesore to be felled. Yet these standing dead trees and downed logs are an important feature of forest ecology.

A forest is a living entity, constantly changing and evolving. Old trees die, new ones sprout up, and over many years the very composition of a forest changes as climax species eventually come to dominate the early and middle succession periods of the forest community. An important component of all forests are dead and dying trees, whether standing as snags or lying on the forest floor as downed logs. So vital is their role in the forest ecosystem that it is not an exaggeration to say that *dead trees give life to the forest*. Norse (1990), writing of a Pacific Northwest rainforest, states that "rotting snags and logs provide the tunnels, dens, and nesting cavities needed by animals from black bears and spotted owls to land snails and springtails. They are the birthplaces for western hemlocks, Sitka spruce, and smaller plants. They are sites of biological nitrogen fixation, adding to the nutrient wealth of the forest." Although writing of the Pacific Northwest, his words ring true for our forests as well, albeit with some species difference.

Snags or wildlife trees

Snags are standing dead trees. They are also known as den or cavity trees and increasingly as wildlife trees. The latter term is especially appropriate for their value to wildlife is immeasurable, providing food, safe nesting sites in the form of cavities and platforms, roosting and denning sites, hunting perches, display stations, and foraging sites for a wide variety of species (Guy 1994).



Snag, or standing dead tree (C. Hanrahan)

Bluebirds, swallows and other birds, as well as food in the form of invertebrates inhabiting the tree.

Death of a Tree

The primary "colonizers" of snags are insects and fungi which soften the wood, allowing it to be easily shredded by birds and mammals. If you usually think of insects as pests, you might be surprised to find out that they're essential to all the other wildlife species that depend on or make use of cavities. The variety of invertebrates inhabiting dead and dying trees is staggering: millipedes, mites,

From the time a standing tree dies until it falls to the forest floor, its many stages of decomposition attract different birds, mammals and invertebrates. Charles Elton (*in Kennedy, 1991*) observes that "dying and dead wood provides one of the two or three greatest resources for animal species in a natural forest...if fallen timber and slightly decayed trees are removed the whole system is greatly impoverished of perhaps more than a fifth of its fauna."

Not all snags occur within a forest. Sometimes isolated trees, left standing by design or chance, hold a lonely vigil over fields or cottage lots, or some other cleared area. These too represent an important wildlife resource, offering nesting platforms for Ospreys (if near water), or hunting perches for flycatchers, Eastern

earwigs, beetles, spiders, ants, and even earthworms. These insects then attract woodpeckers and other forest-dwelling animals who in the course of excavating for food, create holes or cavities which become in turn, nesting sites for birds and small mammals. Biologists call those species which greatly influence other species, "keystone species". Woodpeckers are one such example, for the holes they create as they search for food provide homes for countless other creatures. Fungi also provide food for other creatures, as well as being used by many insects.

A standing dead tree can remain in place for many years. Smaller trees come down sooner, but even they can last for many years, and this should be remembered when considering the "safety" aspects of snags in public places.

How a tree dies:

In human terms, most species of trees are effectively immortal, but urban and suburban environments can be stressful in various ways, and trees may be killed by disease or insect pests, various problems with water, light, & nutrients, and especially by disturbances inflicted on their root system.

-Fred Schueler



A downed log and stump (C. Hanrahan)

Downed logs

An old-growth forest is full of fallen trees, or downed logs, whereas in second-growth eastern hardwood or pine forests logs are much less in evidence, yet even here they form an important part of the overall ecosystem just as they do in any forest or wooded area. In fact, biologists are now calling logs the "hot-spots" of the forest ecosystem.

When a tree falls to the ground, it is quickly taken

over by insects, especially beetles. Earlier, woodpeckers were referred to as a keystone species; beetles serve that same function in downed logs (Norse 1990). As they bore into the log, they open up the way for fungi which in turn help to decompose the inner bark. As the beetles tunnel further into the log they provide access for spiders, ants, millipedes, and salamanders and the process of decomposition initiated by the beetles continues.

Like snags, downed logs provide shelter and denning sites for mammals, birds, and for amphibians and reptiles such as salamanders and snakes. Small animals such as squirrels use logs as easy routes through the forest.

Logs also act as “nurseries” for plants, allowing them a nutrient-rich base in which to take root. Many plants take root on downed logs and it is a fascinating exercise to count the number of plant species growing on a single “nurse log”.

Ecologists have classified five stages of decay in a downed log, from the first stage when a log is intact and not yet decayed, to the fifth, where the log has crumbled into a mass of organic material. Because logs are more moisture-retentive than snags, they decay more slowly since oxygen is excluded from wet wood (IBID). Large old-growth logs can take two hundred or more years to decompose completely. Smaller logs such as those found in this region will decay much faster.

The term “Coarse Woody Debris” or CWD, refers to all the woody debris on the forest floor, not just logs, but stumps and branches as well, rotting or otherwise. As Fred Schueler points out (pers. comm.), our eastern forests are more full of CWD in recent decades thanks to the influx of invasive species such as the Emerald Ash Borer. He says,



Coarse woody debris (C. Hanrahan)

“Now, largely due to Dutch Elm Disease, and successional squeezing out of Aspens, there seems to be a plethora of CWD, and when the Emerald Ash Borer is done with us we’re going to have huge quantities of both standing and fallen wood which will presumably make the woods much more ‘old-growthy’ than their age would indicate.”

It has also been pointed out that various woody plants require a good layer of coarse woody debris in order to regenerate. (Owen Clarkin, Pers. Comm.)

Thus, not only standing and fallen dead trees, but stumps and other woody debris contribute to the overall ecosystem of the forest and the wildlife therein.

Wildlife using snags and downed logs

Birds

Many people perhaps do not realize that when they put up nest boxes each year they are offering homes to cavity-nesting birds whose natural nest sites are holes (or cavities) in snags, hence the use of the terms den or cavity trees. Some of our most familiar birds are cavity-nesters, along with numerous other species, perhaps less familiar. However, nest boxes can never be a complete substitute for natural cavities, for while certain species readily adapt to man-made nest boxes, many others will not, or cannot adapt. Not all birds make use of the cavities in snags for nest sites. For some birds, such as the tiny Brown Creeper, it is the loose bark on dead trees that gives shelter for nests, while for others such as Ospreys, standing dead trees near water provide platforms on which to build their large, bulky nests.



A Pileated Woodpecker has made good use of this snag (C. Hanrahan)

Not all uses of wildlife trees are for nesting purposes. Ruffed Grouse use downed logs for 'drumming' in their spring courtship ritual. And as noted earlier, many birds use snags as hunting perches or display stations.

Mammals

Mammals also make use of snags for both shelter and for rearing young. Martens, weasels, squirrels, other small rodents, bats, even bobcats will den up in cavities. Black bears may sometimes find winter refuge at the base of large snags, as well as in hollowed out downed logs. Squirrels and chipmunks and other small rodents use logs as forest highways.

Invertebrates

As noted earlier, a multitude of insect species thrive on dead and dying trees whether standing or down on the forest floor. In turn, these insects provide much needed food for a variety of wildlife. When these trees are removed from the forest ecosystem, the insects associated with them are also removed, and in turn, the wildlife that feed upon the insects.

Standing Dead Trees in Your Garden

Unless you live on wooded rural property, your backyard is certainly not part of a forest ecosystem. But if you are a gardener wanting to create a healthy, viable wildlife habitat in your own backyard, you will by now recognize the role that dead trees play in attracting birds and other species. As well as harbouring food for insectivores in the slowly rotting wood, snags also offer safe nesting cavities. In the winter these cavities are often used as roost sites, providing the necessary insulation that nest boxes cannot. (However, nest boxes are a suitable supplement to natural cavities in your garden.)

If your standing dead tree is quite large, you may be worried about heavy falling branches. Cut away some or all of them and leave the trunk. If you still think the snag is too tall and overpowering, topping the trunk to a reasonable height might be a solution. A "reasonable height" depends on what you feel comfortable with and what is in the immediate vicinity of the snag (i.e., your house, neighbouring houses). But if you cut the snag back too much, you might as well fell it completely and leave it as a log; it will have little value as a nest site if it is only a couple of metres tall. Naturally the best thing to do is to do nothing, leaving the tree to take its own course, but in a small suburban lot, safety concerns must be evaluated.

If you've left the snag at 4.5 metres or better, but want to disguise it somewhat, plant lightweight climbers such as wild cucumber vine (*Echinocystis lobata*) or native clematis (*Clematis virginiana*) to twine up the trunk. You'll need to provide some support for these vines to get started. Virginia creeper (*Parthenocissus quinquefolia*) and wild grape (*Vitis riparia*) grow fast and can quickly cover a snag with a dense green cover, but these vines are very heavy and can hasten its collapse.

If you want to "dress up" your snag, you can hang seed feeders from its branches or from simple hanging brackets. Suet feeders can be affixed right to the trunk. If you really want to turn your snag into a work of art, hang flower baskets as you would the feeders. Plant the feeders with nectar-rich flowers for bees, butterflies and hummingbirds (see the FWG information sheet on butterfly gardening).

When the snag eventually collapses you can either leave it where it falls, or move it to a more remote part of your garden where it will continue its work of feeding insects, birds, and your soil.

If your neighbours complain about your snag, tell them what you are doing and why; you might change their way of looking at standing dead trees. It is only by changing how we view the land around us that we can begin to help restore and nourish both it and its wildlife.

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2016 Fabulous Fall Fungi Workshop

Richard Aaron

Now in its 7th year, these stimulating, hands-on workshops explore the impressive diversity of mushrooms and other fungi found in Southern Ontario. Suitable for all levels. Max 12 participants per workshop. This year there is a choice between 3-day & 5-day sessions. Location: Queen's University Biological Station. Register early to avoid disappointment (there are waiting lists each year). Details: www.queensu.ca/qubs/events-and-outreach.



FABULOUS FALL FUNGI WORKSHOPS 2016

Instructor: Richard Aaron
Queen's University Biological Station

Session 1 – Sept. 13 to Sept. 16

Session 2 – Sept. 25 to Sept. 30

Session 3 – Oct. 4 to Oct. 7

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- Daily field trips
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- Learn about edible and medicinal species
- Small class size – max 12 per session
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- All-inclusive registration fee

For further details and to register,
go to www.queensu.ca/qubs

**NEW SESSION ADDED!
SEPT. 20 TO SEPT. 23**

Coming Events

Arranged by the OFNC Events Committee
For further information, please check our website
www.ofnc.ca

PLEASE NOTE: The OFNC website ([ofnc.ca](http://www.ofnc.ca)) contains the most up-to-date information on events. Please check it regularly for changes or additions to events. The Club's Facebook site <<http://www.facebook.com/groups/379992938552/>> and Twitter account <[@OttawaFieldNat](https://twitter.com/OttawaFieldNat)> will also be used to announce last minute changes to events. **Note that we anticipate having several weather and year-dependent events that are not included in *Trail & Landscape* and will only be announced at the last minute via our website, Facebook and Twitter.** These include seasonal events such as Snowy Owl viewing, the spring Snow Goose spectacle, Eardley Eagles and Mudpuppy Night.

ALL OUTINGS: Field trips to natural areas in our region and beyond take place all year round. These events are for OFNC members and prospective members. Prospective members are welcome unless the notice indicates that participation is limited, or that bus travel is involved. Guests should be aware that, in all cases, OFNC liability insurance applies to OFNC members only. Times stated for events are departure times. Please arrive earlier; leaders start promptly. If you need a ride, please contact the leader.

Please bring a lunch on full-day trips and dress according to the weather forecast and activity. Binoculars and/or spotting scopes are essential on all birding trips. Unless otherwise stated, transportation will be by car pool.

MONTHLY MEETINGS: Our monthly meetings are held at the **Central Experimental Farm in the K.W. Neatby Building, Salon B, at 960 Carling Avenue**. There is ample free parking in the lot on the West side of Maple Drive by Carling Ave., immediately to the east of the main entrance to the Neatby Building.

EVENTS ORIENTED TO ALL AGES: Kids are welcome on all of our trips. We have highlighted particular hikes as "oriented to all ages" as these are most likely to be enjoyed by typical children. Depending on your child(ren)'s interests and stamina, please feel free to bring them along on any events. For events tailored to kids, check out the Macoun Field Club (<http://www.ofnc.ca/macoun/index.php>).

Saturday
2 July
8:30 a.m.
to
4:30 p.m.

**FOURTEENTH ANNUAL OTTAWA AREA BUTTERFLY
COUNT**

Especially Kid Friendly

Leaders: Jeff Skevington and Peter Hall

Meet: The parking lot at the intersection of Dwyer Hill Road
and March Road (NE of Almonte)

**(Rain date:
Sunday
3 July)**

Description: Similar to Christmas Bird Counts, this event is an all-day survey of butterflies within a 24 km diameter circle. The count area is centred on Manion Corners (SW of Ottawa) and includes several important butterfly areas such as the Long Swamp and the Burnt Lands alvar. No experience is necessary - we will put teams together on site and match up people so that everyone has a chance to learn from the experts. If you have binoculars and a butterfly net, please bring them along.

Butterflies may be captured for identification and release.

Rubber boots are recommended, as some of the sites have a lot of poison ivy. It is an all-day event so bring your lunch.

Call Jeff Skevington Friday evening at 613-720-2862 if in doubt about the weather or for specific questions regarding this event. Use OFNC Facebook or Twitter to arrange car pooling.

There is a \$4.00 charge to participants to support the publication of the results. We plan to meet at 6:00 p.m. after the count for a compilation and pot luck dinner (location to be announced). Please bring along some food to share plus your own drinks. We hope that everyone can make it to the compilation, as it will be a lot of fun; however, if you can't, we will get your data in the afternoon before you leave.

Saturday
9 July
8:30 a.m.
to
12:00 noon

BUTTERFLY WALK IN THE WESTERN GREENBELT

Leader: Michael Olsen

Meet: 8:30 a.m. at Lincoln Fields Shopping Centre, at the northeast corner of the parking lot near Pizza Pizza, just off Richmond Road

or

9:00 a.m. Old Quarry Trail parking lot (just south of the intersection of Eagleson and Robertson/Hazeldean in Kanata)

Description: Stony Swamp and the western Greenbelt can be great places to find butterflies in Ottawa. We will search in some of the fields and along some of the trails in the area. Many species (20 to 30), including native breeding species and migrants such as Great Spangled Fritillary, Aphrodite Fritillary, Mourning Cloak, Eastern Tailed Blue, Summer Azure, Northern Pearly-Eye, Eyed Brown, Peck's Skipper, have been found there. Bring insect repellent, lunch and water. The outing will be cancelled in the event of rain.

Saturday
16 July
9:00 a.m.
to
12:00 noon

RIDEAU RIVER WATER CHESTNUT CONTROL

Leaders: Staff from RVCA and CityStreamWatch

Meet: Contact Justin Robert at 613-692-3571 Ext. 1194, or justin.robert@rvca.ca.

Help is needed to pull rosettes of invasive European Water Chestnut from an area at Black Rapids (see article page 124). The number of volunteers is limited, so please register at the number above. Participants should be comfortable in a canoe; it's especially helpful if you can bring one along with its required safety gear. Also bring clothes that can get wet and dirty, a snack, drinking water, and a sense of humour.

Sunday
July 17
9 a.m.
to
1:00 pm

EXPLORE THE LUSK CAVES

Leader: Derek Dunnett

Meet: Parent Beach Parking in the Lac Philippe sector of Gatineau Park, reachable via Highway 366. Park fees apply.

Description: From the trailhead at Parent Beach, we hike along the Cave Trail. The trail can be muddy in places. Once at the caves, we take turns going through in small groups. There are two sections to the caves. Passing through the thigh-deep water of the first cave will satisfy many adventurers; the second--and may be skipped--cave requires spelunkers to immerse themselves in water. For more info on the caves and some maps see <http://www.ncc-ccn.gc.ca/places-to-visit/gatineau-park/lusk-cave>. We return via Trail 50, along the shore of Lac Phillippe. Highlights include bird song, odonates (we usually see the beautiful Ebony Jewelwing, but no guarantees), and some surprisingly large Yellow Birch. The hike will run rain or shine. Bring water, a snack, sunscreen and insect repellent, closed-toed footwear you can get wet, and a change of footwear for the trip back. Waterproof flashlights, headlamps, helmets, and towels are all good ideas. Children who enjoy long hikes and who bring their guardians will enjoy the adventure.

Saturday
20 August
7:30 a.m.
to
2:00 p.m.

LOST BAY NATURE RESERVE

Meet: 7:30 a.m. at Lincoln Fields Shopping Centre, at the northeast corner of the parking lot, near Pizza Pizza (Richmond Road at Assaly Road). Due to very limited space for vehicles at the reserve, carpooling is strongly encouraged.

Leaders: Ontario Nature staff

Description: Ontario Nature maintains a system of 24 conservation reserves across the province. One of these, the Lost Bay Nature Reserve, was expanded in 2014, thanks to donations from Ontario Nature members, concerned citizens, and member organisations including the OFNC. Lost Bay currently protects 238 hectares of forest, wetland, and shoreline in the Frontenac Arch, which is home to a very diverse assemblage of plants and animals, including 24 species at risk. Ontario Nature staff will give OFNC members a guided tour. The usual packing list is recommended: your lunch, water, sturdy footwear, long pants, more water, weather-appropriate clothing, sunscreen, binoculars, etc.

Please note: it will take approximately two hours to drive to Lost Bay, and the tour will last about two hours. A 2:00 p.m. return to Ottawa is only an estimate. This trip is strictly limited to members only. For information, contact Jakob Mueller at jm890_7 AT hotmail.com or 613-314-1495.

Saturday
27 August
8:00 a.m.
to
12:00 noon

THE EDGE OF THE SHIELD - EXPLORING WEST OF ALMONTE

Leader: Ken Allison, 613-256-4283

Meet: 7:20 a.m. in the north east corner of the Lincoln Fields parking lot close to the intersection of Assaly and Richmond Road near the Pizza Pizza.

or

8:00 a.m. at home of Ken and Ruth Allison, just west of Almonte at 561 Wolf Grove Rd.

Off-street parking at the Allison property is somewhat limited, so car pooling is encouraged.

Description: Step outside of your usual patch and explore the edge of the Canadian Shield in Lanark County. This will be a general interest walk, including botany and birds, but also anything else that we come across. This will be a half-day outing, with a fair bit of walking on good trails with some hills. We will see beaver ponds and typical Lanark County forests at various successional stages. If water levels are suitable we will probably finish up at the Almonte lagoons to check for shorebirds and waterfowl. Children who can walk a few kilometers are very welcome. Wear good walking footwear, bring water, a snack, binoculars and spotting scope.

Saturday
10 September
10:00 a.m.
to
3:00 p.m.

BUG DAY!

Leader: Sophie Cardinal

Location: Salons A and B of the Neatby Building, Central Experimental Farm.

Description: Bug Day is coordinated by the Entomological Society of Ontario in partnership with AAFC and OFNC.

Visitors are invited to learn all about the fascinating world of insects, from expert scientists on hand. Activities will include: a live insect zoo, guided insect nature walks, cockroach races, kid's insect crafts, ask a bug expert, building insect collections, insect eating and more. This event will happen rain or shine.

Sunday
11 September
8:00 a.m.
to
2:00 p.m.

EARLY FALL BIRDING ALONG THE OTTAWA RIVER

Leader: Jeff Skevington, 613-720-2862

Meet: At 8:00 a.m. along Cassels St., opposite Mud Lake, in Britannia Village.

Description: Experience the diversity of Ottawa's avifauna during the peak of Fall migration. Expect to see warblers, sparrows, waterfowl, shorebirds, gulls and others. Study the subtle differences between similar species as we explore the Ottawa River from different vantage points. We start at Britannia, and will move slowly west (unless other opportunities present themselves), visiting some of Eastern Ontario's best migratory staging areas. Bring a lunch. This is a rain or shine walk.

Tuesday
13 September
7:00 p.m.
Social

7:30 p.m.
Presentation

OFNC MONTHLY MEETING

PEARY CARIBOU: AN ICONIC HIGH ARCTIC SPECIES

Speaker: Dr. Micheline Manseau, Wildlife Ecologist, Parks Canada

Location: Salon B, K.W. Neatby Building, Central Experimental Farm, 960 Carling Avenue

Description: Caribou are found across the circumpolar north, occupying mountain and boreal forest habitat at the southern limit of its range and the tundra farther north. At the northern limits, in the Canadian High Arctic Archipelago, caribou occupy more rugged landscapes and extreme climates. These smaller bodied High Arctic caribou populations (or Peary caribou) have captured the interest of explorers and scientists over the years due to their unique features and adaptive traits. This presentation will outline the origin and evolution of Peary caribou along with past and future conservation challenges.

Saturday
17 September
8:15 a.m.
to
12:00 noon

**TREE WALK IN GATINEAU PARK:
AN INTRODUCTION TO TREES AND TREE
ECOLOGY OF THE OTTAWA AREA**

Meet: 8:15 a.m. Lincoln Fields Shopping Centre, at the
northeast corner of the parking lot, near Pizza Pizza
or

9:00 a.m. at the Gatineau Park Visitor Centre parking lot on
Scott St., off Old Chelsea Road, Gatineau Park

Leader: Justin Peter

Description: The Ottawa area has over 50 native tree species, each of which has adaptations that allow it to exploit certain conditions successfully. We will walk the Sugarbush Trail, identifying various trees along the way while looking at how their presence as species and their individual forms can inform us about local environmental conditions, both present and historic. Besides the abundant Sugar Maple and other common species, we expect to see some locally sporadic to uncommon trees, including Butternut, Rock Elm, Slippery Elm and Bitternut Hickory. We will draw heavily on tree lore and on our own field observations. This excursion should appeal to those who are interested in how various trees fit into our local forested environments as well as those who would like a better grasp of tree identification. If time, energy and interest allows, we may "branch out" and explore surrounding areas. A drink and a snack for the return to the car are recommended. Sturdy footwear for walking is recommended as well. Bring binoculars if you have them. This excursion will be cancelled in the event of stormy weather or heavy, sustained winds/rain. Difficulty: the Sugarbush Trail is universally accessible and is rated as easy by the NCC. We may also walk a short side-trail that is considered moderate in difficulty.

Sunday
18 September
9:30 a.m.
to
1:00 p.m.

**STROMATOLITES AND OTTAWA GROUP
LIMESTONES**

Leader: Paul Gammon, Geological Survey of Canada (613-730-7725)

Meet: 9:30 a.m. at Samuel de Champlain parking lot, Gatineau. Head north on Pont Champlain Bridge to the Quebec side of the Ottawa River. Turn west onto Boulevard de Lucerne at the first set of lights on the Quebec side. Proceed 150 m along Boulevard de Lucerne and turn south (left) into Samuel de Champlain parking lot. The entrance to this parking lot is relatively small and the lot is not easily visible from the road due to trees, so if you reach the Rue Champêtre exit on the north side of the road, you have gone too far west.

Come explore the 450 million-year-old Ottawa Group limestones, deposited in the Ottawa Embayment during the Ordovician Period. This was possibly the most interesting period of all in earth's history, marking the time when our current marine ecosystems evolved. Prior to this, the Cambrian "explosion" of multi-cellular life was a set of random evolutionary experiments, many of which were evolutionary dead ends. The two field sites will show fossil groups and arrangements that demonstrate this Ordovician revolution. Our first stop is reminiscent of the earlier simple ecosystems, as we visit Ottawa's famous stromatolites, accretions formed in shallow waters by micro-organisms (usually blue-green algae). Our second stop demonstrates the ways in which fossil diversity increased during the later Ordovician period. This is also a great spot for a picnic lunch. Bring a lunch, a drink, and a hand lens if you have one. This trip will be cancelled if it rains, as it is difficult to observe features on wet limestones. Kids with an interest in fossils are encouraged to come along, as long as they are supervised.

Tuesday
11 October
7:00 p.m.
Social

OFNC MONTHLY MEETING
BIRDS OF THE GALAPAGOS

Speaker: Justin Peter

Location: Salon B, K.W. Neatby Building, Central
Experimental Farm, 960 Carling Avenue

7:30 p.m.
Presentation

The Galapagos Islands are often touted as a laboratory of evolution by natural selection, and some of the archipelago's birds are among the best-studied organisms anywhere. In this illustrated talk, Justin will help us get acquainted with some of these birds. We'll see what they look like and how they behave, as well as gain insights into their origins through some of the latest research findings stemming from decades of research.

Sunday
23 October
9:00 a.m.
to
4:30 p.m.

GEOLOGICAL TOUR OF OTTAWA

Leaders: Greg Froude and Martha Farkas

Meet: W. Erskine Johnston Public School, 50 Varley Dr.,
Kanata.

Description: This site is a wonderful exposure to Precambrian shield metamorphic paragneiss with various generations of both mafic and felsic igneous intrusions. After examining this "basement rock", the participants will visit other sites representative of different layers of sedimentary rock which accumulated in the various paleoenvironments that existed in Ottawa during the Cambrian to Ordovician. Participants will get introduced to, discuss and apply various Earth Sciences topics including paleontology, sedimentology and stratigraphy, mineralogy, as well as basic metamorphic and igneous petrology. All site visits go ahead regardless of weather. Bring a lunch, something to drink, dress for the weather and wear comfortable walking shoes/boots.

ANY ARTICLES FOR *TRAIL & LANDSCAPE*?

Have you been on an interesting field trip or made some unusual observations?
Write up your thoughts and send them to *Trail & Landscape*.

DEADLINE: *Material intended for the October - December issue must be in the editor's hands by August 1, 2016. Send your manuscripts to:*

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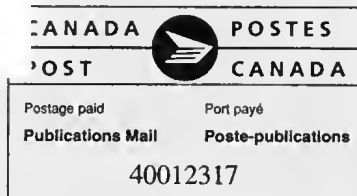
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